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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,311	12/16/2003	Dennis Kelly	I-24296	5955
46582	7590	12/21/2004	EXAMINER	
MACMILLAN, SOBANSKI & TODD, LLC ONE MARITIME PLAZA - FOURTH FLOOR 720 WATER STREET TOLEDO, OH 43604			BURCH, MELODY M	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/737,311	KELLY ET AL.
	Examiner	Art Unit
	Melody M. Burch	3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/12/04.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the axle flange claimed in line 2 of claim 4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the

description: elements 42A, 42B, 42C, and W mentioned on pg. 7, element 62 mentioned on pg. 8, and element number 10' mentioned on pg. 11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: element numbers 40A, 40B, 40C in figure 6, number 92 in figure 4, and 62A,62B,62D in figure 7. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Marked-up Drawings" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

5. The disclosure is objected to because of the following informalities: vehicle is designated by both numbers "198" and "202" on pg. 10, and brake shoes are designated by both numbers "110" and "100" on pg. 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 4, 7, 8, 10, 11, 14, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5865275 to Anger et al.

Re: claims 1, 8, and 15. Anger et al. show in figure 3 a vehicle brake assembly

comprising a backing plate 12 having a centrally located first aperture formed therein shown in the area surrounding element number 24, the backing plate 24 shown within element 12 (labeled element 20 in figure 2) adapted to support a drum brake shoe assembly 11 of a drum in hat parking and emergency brake, and a drum in hat adapter 16 having a centrally located second aperture as shown and a plurality of smaller mounting apertures shown to the left of the lead line of number 16 and to the right of the lead line of number 30 and disclosed in col. 3 line 6 formed therein about the centrally located first aperture thereof, the adapter being formed as a one piece stamping as disclosed in col. 3 line 5 and including an integral abutment member or projection shown in the area of the lead line of number 16 formed therewith during the stamping thereof.

Re: claims 3, 10, and 17. Anger et al. show in figure 3 the limitation wherein the adapter functions as an axle flange and is adapted to be secured to a vehicle axle tube as disclosed in col. 2 line 53.

Re: claims 4 and 11. Anger et al. show in figure 3 the assembly further including an axle flange or the inner portions of the unnumbered rotor in front of element 12, the axle flange adapted to be secured to an axle tube disclosed in col. 2 lines 53-56 which in turn is adapted to extend through the centrally located first and second apertures of the backing plate and the adapter, respectively.

Re: claims 7 and 14. Anger et al. show in figure 3 the limitation wherein the adapter includes a pair of ears (one of which shown in the area of the lead line of number 16), each of the ears provided with a hole formed therein as shown and

adapted to receive a fastener for attaching a disc brake caliper assembly 14 to the adapter.

Re: claim 16. Anger et al. show in figure 3 the limitation wherein the adapter includes at least one raised solid projection shown in the area of the lead line of number 16 formed thereon or in an alternate interpretation wherein the adapter includes at least one raised solid projection 30 formed thereon.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 5, 6, 9, 12, 13, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5865275 to Anger et al.

Re: claims 2 and 9. Anger et al. show the limitation wherein the backing plate includes at least one raised hollow projection shown surrounding element 22 and the adapter includes at least one raised solid projection 30 which is adapted to be received into the at least one raised hollow projection.

Anger et al. fail to disclose how elements 16 and 24 are secured.

Anger et al. teach in the prior art section the use of a backing plate being fastened to an adapter via bolting as taught in col. 1 lines 51-52. Such an attachment can be considered as a form of metal forming operation, as broadly claimed, since the

use of bolts for connecting causes the metal of one of the elements to be connected extending around the bolt to expand a small amount.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the means to fasten the backing plate to the adapter to have included bolting, as taught by the prior art section of Anger et al., in order to provide an old and well-known means of connecting the backing plate to adapter for proper functioning of the brake assembly.

Re: claims 5, 12, and 18. Anger et al. describe the invention substantially as set forth above, but do not include the limitation of the adapter being formed from carbon steel or high strength low alloy material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the adapter being formed from carbon steel or high strength low alloy material since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Re: claims 6, 13, and 19. Anger et al. show in figure 3 the adapter having a generally uniform thickness.

Anger does not include the limitation of the thickness specifically being approximately 12. 5 mm.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the thickness of the adapter of Anger to have been 12.5 mm or any other appropriate thickness, as best determined by routine

experimentation, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215 (CCPA 1980).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 6729444 to Schmandt et al., 6360852 to Sherman, II et al., 5884732 to Anger et al., 6637553 to Hale, 4854423 to Evans et al., and WIPO 96/41085 teach the use of similar drum-in-hat brake assemblies including adapters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3683

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December 9, 2004

Melody M. Branch
12/9/04